1IRRIGATION SYSTEM IN THE ASHLEY VALLEY and THE ASHLEY VALLEY RESERVOIR COMPANY March 3, 2005

Tape #385

Ray Hunting - President of the Reservoir Board Lorn Richens - Director

Ray: Both of us being directors on the Ashley Valley Reservoir Company, we have a knowledge and we have increased our knowledge of the workings of the Ashley Valley Reservoir Company. There are records on file of the various irrigation canals within the Valley that the reservoirs on the mountain deliver water to - to supply water to the lands under those canals. This is basically the function of the reservoir company. The way they were established to the best of our research and knowledge and memories of what our parents have told us and heard them and talk about - it was such a big item at the time that every time they saw each other, that's what they talked about - "what's going on, on the mountain" - that was the topic of the day. "What are we doing about more water?"

Lorn: This all started out in the early 1900's. By 1919, according to the minutes, that's when they got real serious about all this. A lot has taken place since 1919. The Company has always had trouble with money. You know, during the '20's and 30's, during the Depression Years, they always needed money, interest rates were high, they had quite a struggle building these facilities.

Sometime back, Marilyn brought this subject up and so I wrote a little bit of introductory type history and I think I'll go ahead and read that now and then we'll add to it as we go along.

Ray: Ariel Alfred, is one of the last living survivors of that project. We interviewed him and discussed this in length and got a lot of this information from him. He was a young man at that time and is still real sound of mind and got a good memory of what happened at that time.

Lorn: When the first settlers came to the Ashley Valley, they came into an area which had a great deal of agricultural potential if only they had enough water to cover the land. The Ashley Creek, being the primary and only source of water for the area was soon diverted into canals, which delivered water to various parts of the valley. This system which is still in place today, works very well.

About 1919 or there about, maybe sometime before that. A group of men organized for the purpose of developing reservoirs sites in the mountains. Over a period of time a total of about twenty different sites were explored. When in reality only five of these original twenty sites received the proper appropriations and were actually built. These includes the Ashley Twin Lakes, the Upper Goose Lake, the Lower Goose Lake, the Long Park Reservoir and the Oaks Park Reservoir.

The Twins and Goose Lakes are located on the headwaters of the South Fork of Ashley Creek. Long Park is located near the head of the North Fork of Ashley Creek. Oaks Park is located on the Brush Creek drainage which is the main source of water for Brush Creek and Jensen.

Because of the location of Oaks Park it was necessary to build what is called the Transmountain Canal. This canal is some seven miles long and empties into the Ashley Creek Gorge down stream from the Red Pine Setting.

As time went on it became necessary for the Company to become more fully organized with Articles of Incorporation and By-laws. This was necessary in order to borrow money and be in line for various programs such as the WPA and etc. The Articles of Incorporation were accepted by the State of Utah in May 1937.

Later on when modern equipment became available, bull dozers, backhoes and etc. the original construction was enhanced with compacted dirt fill. (So - we need to back up and say that the original construction of the Twins and the Long Park Reservoir was accomplished by placing log cribbing and covering with dirt. Much the same way a beaver builds a restriction across a stream. During the first construction phase, it was all done pretty much with horses.) But later on when this equipment became available the original banks of the Twins and the Goose Lakes have been added and enhanced over the years and today these dams are classified as stable and safe dams.

Ray Hunting, who is one of the present directors and has had a lot of input and has done a lot of the work on enhancing the stability of these dams — up-grading the freeboard, removing some of the old cribbing and replacing it with dirt fill and so forth.

Ray: One thing we may add is the size of them --- we've got a copy of the actual acre foot of those projects.

Lorn: The water storage capacity for these various projects – course Oaks Park is the largest one. It has some 6250 acre feet storage capacity. The Long Park Reservoir is about 531 acre feet. The Upper Goose is about 335 acre feet and the Lower Goose is just a little puddle down there, it only holds about 50 acre feet. The Ashley Twins holds about 365 acre feet. So it gives us a total storage capacity up there of about 7530 acre feet of water. Which is pretty important for this dry valley.

The original men that started some of these projects were — in the minute book from December 30, 1919 --- they have Enos Bennion listed as President, C. Bird, I think that's Clarence Bird. J.O. Karren, Nyle Huey, James Martin Alfred, J.J. Slaugh, J.A. Whitman, William Winward, and E.J. Young was the secretary. These men were the ones that first started holding meetings for what is now the Ashley Valley Reservoir Company. They kept minutes of their meetings and they kept books of their income and expenditures.

From these humble beginnings the Company has devolved into a financially solid company which delivers water that has been stored in the mountain reservoirs into the Ashley Creek. Where it can be diverted into the various canals to be used by the various stockholders or used in conjunction with the Steinaker Project; for exchange water above the Steinaker Service Canal. At the present time [2005] this is how the majority of the stored water is being used, therefore becomes a integral part of the Steinaker Project which was built by the Bureau of Reclamation.

During the early 1900's there were several large sheep herds that used the mountains for summer grazing. A large area was fenced off in an area where the Oaks Park Reservoir now covers. It was being used as a place to keep their bucks, hence the name, "The Buck Pasture." After the construction of the dam, it became known as the Oaks Park Reservoir. I don't know who it was named after. [Hyrum Oaks]

The building of the Oaks Park Dam and the Trans-mountain Canal required a great deal of engineering expertise. Leon P. Christensen was the head engineer and was responsible for the design and the construction of the facility. Robert Hunting was the foreman for the construction of the Oaks Park Reservoir. These two men were great friends and work together and did a fantastic job on this.

After some sixty five years of weathering; the rigors of winter stresses and numerous drainings and fillings the dam, today, is regarded by the State and Forest inspectors as one of the finest and most stable in the state.

Ray: Maybe we could add that you and I are both nephews of Robert Hunting. So we were involved with a lot of the conversations held in local driveways and out to the corral and amongst the neighbors concerning that project.

Lorn: That's right. As a young person growing up — Uncle Rob – that's all we talked about when we visited with Uncle Rob, building the canal, building the reservoir up there. I remember when I was eight or nine years old, I had the privilege of going on the mountain with Uncle Rob. He had an old orange, Chevrolet truck. It was probably a one or one and a half ton and we hauled fuel to a tractor up there. I can't remember whether we went to the dam site or whether we went to the canal but I remember it was quite an adventure for me as a young kid to go up there with Uncle Rob.

We called him Uncle Rob or Uncle Bob. He was a great friend to our family. My Dad's sister was married to Uncle Rob. That's how come we got to have a lot of interaction and fun with him. Ray's Dad [Earl] was Rob's brother, he was just younger than Rob. They lived close together down there in Naples area.

Ray: That was the biggest thing that happened in this valley since the settlers first came here; that was the talk about by all the neighbors.

Lorn: It certainly made it so the land could be irrigated later on in the season.

Ray: It is the life blood of any farming community in this arid climate where we live.

Lorn: Today Vernal City and the valley-wide users own a significant number of shares in this company, they use that water for culinary purposes. It is a very important part of the over-all system.

Well, they had to build the Oaks Park Dam and the Trans-mountain Canal. The Canal is about 7 miles long and it originates right in the bottom of Brush Creek. There was a lot of discussion and a lot of bets made whether the water would run from Brush Creek to Ashley Creek because everybody knows that Brush Creek is lower on the mountain than Ashley Creek is. But Leon Christensen surveyed that canal and talking with Lyle Hunting ----- he told me he and Leon's son Boyd, spent lots of days up there, carrying the rod for Leon down through the trees and sometimes they could only go for ten or fifteen feet at a time.

Ray: Those people got discouraged so bad that it's a wonder they didn't say to hell with the whole project. [Negative words given] by a lot of prominent people in the community. But there was always a bunch of hard-heads that said, "no, it will work" and they just kept fighting till

they got it to run out and drop into Ashley Creek. There was a lot of people that laughed at that project.

Estella: I don't know if you are acquainted with that famous rock on the way to Oaks Park, called Ray's Rock. [laugh - there must be a story there] but if you stand there by Ray's Rock and look up the cut, that canal is really hanging on the side. That was quite a bit of engineering to get that to come around that mountain and down to where the CCC Camp was.

Ray: There is still quite a bit of stock that was never sold because people didn't think it would work. We just hold it on the books as treasury stock to enhance all the other stock that is there rather than to know who to sell it too; there is such a demand on it today.

Estella: How much treasury stock do you hold in the company now?

Ray: I don't know right off hand, but it was because they couldn't sell it. They couldn't sell all that they originally set out to sell to stockholders.

Estella: You would only have to run it once in the Nickel Ads now.

Ray: WOW!!!

Lorn: Well, the controversy over whether the water would run around this canal was an on going thing. They didn't build a big canal to begin with; they built, essentially, a ditch. They turned a little bit of water out of the Brush Creek and by golly, it went around and over the high spots and across the mountain. There were some of the old timers like Orson Hall who was one of the great characters of all time and spent a lot of time up there herding cows and so forth. He said there is no way you're going to get water to run up that hill. But it does; it's an optical allusion.

Ray: You know, Lorn, right today, I can ride a horse down that thing and look at it and it's a marvel to me that it would work. That the water would even run down it right to day when I can see it running with a good ripple. Throw a stick in it and it will just ripple right on down.

Lorn: It certainly looks like it's going uphill. It's really quite a canal now. If anybody that listens to this and wants to have a really nice outing they should go walk the canal. It has a nice access road along it now and it's really pretty up in there.

Anyway, they built the canal before they built the dam. The original excavation at the dam site and down through - at least part of the canal, was accomplished with horses, dynamite and hand work. The fill material on the dam was put in place with horses and scrapes and of course that was a slow process. Many trips of the horse hooves did an excellent job in compacting the fill. They did have one small D2 Cat which pulled a homemade roller to start with. This also helped in compaction of the fill.

A little bit later on after they got going, they did have a D7 Caterpillar with a dozer blade on the front and they had a D8 Caterpillar and that's how they finished building the canal and finished putting fill in the dam was with these tractors; along with all the work that had been done by horses previous to that.

Now there is a tunnel that goes from where the original Brush Creek stream went down through there; it goes through a solid rock embankment and the purpose for that tunnel was to divert water over into the canal to begin it's seven mile journey from the Brush Creek drainage to the Ashley Creek drainage. After this tunnel was built through the dam then they were able to do the excavation work on the dam itself. They dug a key-way and built this dam according to the engineering specs. The face of the dam was rip-rapped with hand laid rocks. These rocks have remained in place to the present time without any maintenance problems. The spillway which is like a 180 feet across has hand placed flat rocks and grouted with cement. This remains today, as an unmatched piece of artwork. Various inspectors that come to the area all make comments about the unique work of art.

A little chronologically history which is certainly not complete. Certainly needs to be added too. The construction was pretty well under way on the Oaks Park Dam and canal in 1937. After completing the construction of the Montez Creek Dam which is located on the west side of Uintah County, two Vernal men, Niles Haslem and Arvel Allred drove an RD7 and a RD8 along with two twelve yard scrapers and one Sheepsfoot camper from Montez Creek to Vernal and on up to Kaler Hollow. From Kaler Hollow they worked on the canal that went on out to where it drops off into Ashley Creek. Then they worked on the canal on up to the dam site. I think at that point in time they took those tractors and rode them on up to Long Park and finished that dam. Then came back and finished off the Oaks Park Dam. That's my understanding after talking to Ariel about that. He was a young man of twenty years old and hired out to drive one of those tractors.

Ray: Probably one of the reasons they needed those tractors on the end of that project was the key-seat and the footers were more drug in on the level, out of the park, out of the area that was going to be inundated by the water. The water depth on that was 42 feet — so that's quite a lot of lift to put on a team of horse to pull that dirt up out of the bottom and put it up on the top of the dam. The dam has got at least ten foot or more of freeboard on it. That's a lot of dirt to lift that high with a team of horses. That's a lot of work and take a lot of time.

Lorn: Well, they did finish work with these two tractors. Might say a word or two about them. When they were building the Monte Creek Reservoir in the early 30's, by 1936 they decided they needed something besides horses to build it with. So they leased an RD8 and RD7 and two twelve yard scrapers and sheepsfoot camper from the Landis Equipment Company. The Landis Equipment Company is now known as Wheeler Machinery. Niles Haslem and Ariel Alfred went over and hired out as operators on these two pieces of equipment.

When they brought those tractors over from Monte Creek, course at that time the Church was the central organization for the community — there was a Mr. Colton, a Mr. Calder and a Mr. Bennion

formed this little company and the church paid off the tractors from the Lands Company; then they put them to work on this reservoir project. Everybody realized they needed more equipment, more power than just horse power. So these tractors were a great boon to doing a lot of work around the community and it was sponsored by the church.

Ariel told us that the rental fee for the RD7 and the dozer blade was \$2.90 an hour. The RD8 was \$3.50 an hour plus the operators. You compare that with today's prices and you can see what inflation has done. At any rate, Ariel told us he broke out in 1937 as an operator, he was twenty years old and by the end of June 1937 the Ashley Valley Reservoir hired both of the

tractors and they drove them up to Kaler Hollow and worked on the canal then they moved to Government Creek and worked on the canal. Then the WPA at that time was building the tunnel and they got the tunnel completed and they moved up to Long Park, finished that then came back and worked on the Oaks Park Dam.

According to Ariel the winter of 1937 was very dry. They didn't have any snow up there. They worked up there till December 23, before they came down. They didn't haul any dirt onto the dam in 1937. They cleaned the trees and so forth. Then in 1938 they started hauling dirt; the bulk of the dam was built in 1939 with scraper and cat. Claude Alfred went up with Ariel to do that work because Niles had transferred over to State Road at the end of 1938.

The first project water was delivered in 1939.

I'll just read what I've written after Ariel Alfred interview.

When they began working on the canal - on down to Grasshopper Flat, that's where they started, when they finished there they moved on up to Government Park and worked on the canal from Kaler Hollow up to Oaks Park Dam Site. This work continued in to 1938. Work was shut down during the winter months. There was considerable opposition to the, so called, Trans-Mountain Canal, because most people considered that some portions of the canal were up hill and of course, water won't run uphill. Consequently, the first canal was merely a ditch, to test the grade and etc.

In the chain of events, to get this project completed, the tunnel, which I can't recall how long it is. It's like 350 feet or something like that, isn't it, Ray?

Ray: Yes, I'd say so.

Lorn: The tunnel was completed and this enabled the construction workers to divert the water from the original Brush Creek channel into the newly completed ditch; and/or back into Brush Creek so the Dam Site could be excavated down to bedrock and the compacted earth-filled dam could be constructed in the Brush Creek channel. This work was accomplished during 1936-37.

During 1938 and 39 the majority of the dirt work was done on the dam itself. This work was completed in 1939 when water was beginning to be stored and consequently delivered to Ashlev Valley.

Long Park Reservoir Dam was completed in 1938. Much of the Long Park was built using horses. In 1938 the Ashley Valley Reservoir Company moved the RD7 and the RD8 tractors to Long Park to complete that project then back to Oaks Park to complete the Oaks Park Project.

Many men from the Ashley Valley were employed during the construction of the Ashley Valley Reservoir Company's facilities. Many men and many teams of horses were employed. They moved trees and rocks and hauled dirt and etc. Needless to say there was a great deal of hand work to be done. The digging of the tunnel with wet-well head gate was done in the solid rock formation. The portion of the tunnel in front of the head gate was lined with concrete. This portion of the tunnel is pressurized when the reservoir has any water in it. The tunnel has concrete linings, some 25 feet in back of the head gate, then goes into the open rock formation and on through the natural formation to Brush Creek.

At this point there is a structure wherein water can be diverted into Brush Creek or down the Trans-Mountain Canal.

The original concrete that was placed in the tunnel has had a small amount of grouting but for the most part is still in tact, serving it's purpose very well. Rock was hand-placed on the face of the dam to prevent more wave erosion. These rocks vary in size and after their original placement have not required any further maintenance. The portion of the original spillway has been rebuilt and moved about fifty feet down stream away from the tunnel and the diversion head-works.

After the initial test-run of the ditch the canal was enlarged and improved to a point that it would carry fifty or sixty cubic feet per second.

This canal exhibited several leaks, some of which have been fixed; some occur in fractured rock formation where it is difficult to identify where the leak is.

Ray Hunting, a longtime director of the Company has been responsible for much of the improvement that has been done on the canal. The canal now has an access road, the full length, which enables maintenance work to be done. At the presence time, 2005, the Ashley Valley Reservoir Company is actively engaged in promoting a project wherein the entire canal can be placed in a pipeline.

Over the years several small portions of the canal has been placed in a pipeline. As in the beginning, where money was an important issue; money is still the central concern today.

At the present time the Ashley Valley Reservoir Company operates and maintains five facilities; the Twin Lakes, Upper and Lower Goose Lakes. Long Park Reservoir, Oaks Park Reservoir along with the Trans-Mountain Canal. These facilities make it possible to deliver some 7500 acre feet of water into Ashley Creek to be diverted into the various canals. It is an integral and an important part of the irrigation system, as well as a portion of the culinary system for Ashley Valley and Jensen.

Ray: If we could get that into a pipe, then we could increase our flow coming out of there to fifty five or sixty second feet and deliver more water during that critical week right after second crop hay and to finish off corn and grain. It would be a real asset to the community – for the great savings of water that is lost; when we increase the pressure on the canal. We can't see a leak but we know through measurements that it does make it seep a lot worse. That's our thought in mind - we can develop a lot of water by saving it.

Lorn: That's certainly true. There has been a lot of people involved with the Company. We could go back through the minute books and find out who all the directors have been up to this point. I won't even guess how many there have been. But one that comes to mind was Dee Jenkins who started his tenure on January 11, 1949 and he resigned his position because of health reason on March 17, 2000. That's 51 years of service as a director on this Reservoir Company and 32 of those years he served as the president. Now if anybody is going to beat that record - they're going to have to get on early and stay on late.

Ray: It's because of that type of dedication that has caused this thing to function good as it does and kept the expenses down and kept water coming into the valley.

Lorn: I think the next person in line for longevity of service is Ray Hunting. He started in January 1974 till 2005. That's 38 years. That's a pretty good record himself.

Ray: If you live in a community, you have to be involved in the community. Just for laughs and a little tid-bit that I recall is Grasshopper Flat. According to the permit, [with the Forest Service] the water was to be brought to a point as Grasshopper Flat on Taylor Mountain at the head

waters of Davis Hollow, to be turned loose to form it's channel to Ashley Creek. It went down toward Red Pine Setting and dropped off into Ashley Creek/Red Pine Setting. There is about a mile of that goes down, more or less an open area away from trees, then it goes into the trees and drops off really steep into rocks.

The Forest Service (I probably shouldn't put names to this but I'm going to anyway because they are all dead.) A Ranger by the name of Bill Horst had us put a cat in the canal and widen the bottom of it, going down through Grasshopper Flat; claiming it would spread the water out and stop the erosion. Well, according to pegs driven along the canal bank and measurements by the Forest Service the erosion wasn't as great as what he said but they did it anyway. Made the Reservoir Company put a cat in there and flatten the bottom of the canal. That made it erode worse because it tore all that ground loose again.

That was a great sore spot with the Forest Service and their records and they carried it on from one Ranger to the next and kept fighting the Reservoir Company over that Grasshopper Flat. Well, when we had our annual stockholders meeting and because Reservoir Company delivers the culinary water to the valley, the City representatives came to our meeting and they wanted to impeach the directors and get somebody that would work with the Forest Service. (I know this happened, because I was a director at the time.) So we argued with them and put it off because we didn't have the money to spend on what the Forest Service wanted done. Finally the Forest Service agreed to go along with whatever the Soil Conservation Service recommended.

We got a man by the name of Jasper L. Holland from Washington State to come. He was an older gentleman with a lot of knowledge; he took his equipment and checked the formation and all that.

We started at Grasshopper Flat and I walked down it with him. The Forest Service got their pickup, rode around and drove down to the bottom. He tested the bank and I explained to him the posts they had driven in the ground and how long they had been there, how much erosion had taken place. They then decided they would come back to Vernal and meet at the Forest Service office and discuss the remedy for the problem.

The time was turned to Mr. Holland and said, I'll tell you what, if you want to dress the window up a little bit you could plant a few willows but I could not put my name on any recommendation for expenditures any greater than that.

The Forest Service went bizerk. "Who in the hell are you to come down here and tell us how to fix a problem that you know nothing about?" He said if you want to know anything about me - check my credentials - I'm the head of eleven western states on these kind of problems. My name is Jasper L. Holland and I advise you to check me out.

That didn't end it and the Forest Service just kept right on pecking. They threatened to lock the head gates down and not let us run any water out of there. So the stockholders got excited about not being able to get their water - we had a lawyer here in town by the name of Hugh Colton who was not only a lawyer but a stockholder in the Company too. He had more water in his veins than blood and he wrote a letter to the Forest Service. He said if you don't have police power, which I don't think you have, don't you lay one hand on that head gate or we will cut the lock off, turn the water on. We'll turn all the water off to the Forest Service personnel's houses and the others farmers will be march ed on Ogden, Utah which was the headquarters of the Forest Service of this region.

We got by for another few years then we had to concede and put it in a pipe. It's been a fight to keep that water going down there all the time. Sell it to the people to start with. It's been a good project for the Valley.

Lorn: We've had a lot of different discussions with the Forest Service about maintenance along the canal. We wanted to build an access road along the canal so we could get equipment in there to fix leaks. Now days you have environmental impact studies and studies about everything. They delayed the project of building this road for two or three years so they could study the goshawk. They had university students come out for their summer jobs and they spent all summer up there surveying for goshawks. Well, after it was all said and done, we were able build an access road up the canal because the best thing they could come with was a "possible nesting area" for goshawks. They never did find a nest in the immediate area where we wanted to work. But we still could only work around certain times of the year and so forth.

I've been associated with the Company since February 1983. We've had a lot of good times on our trips to the mountain to do various things. We go up there with the Forest Service on inspection tours, we go with the State Engineer on inspection tours. If there a problem arises we go and see if we can solve the problem. We've had excellent people to work together. We've got a lot accomplished. The canal has been rebuilt, the free-board has been enhanced, it's much safer and much easier accessed than ever before.

Ray has been president since Mr. Jenkins left. Ray has one thing we have to comply with whenever we go up there. We have to take a watermelon along with us. He likes to have a watermelon refreshment before we come home. We've had a lot had good times and working relationships. It's a good facility for the community and we encourage anybody that is interested in it to come go for a tour with us up there.

Ray: Before we got the Forest Service to let us put the road along the canal I helped several times ---- I know this is not a fact, but the thought goes through your mind that the Forest Service people are setting back there in the trees laughing at those dumb son of a bees packing rolls of plastic tied to two poles - one on each side and four guys holding the poles - hooching that up through the trees; to repair a dam just because you couldn't take a vehicle down it to haul the things you needed. Then try to plug it off, by hand. It was a real problem.

Then the Forest Service changed personnel and these people were easier to work with and made it more compatible for the Reservoir Company to conduct business on the Forest Service.

Lorn: There has been a lot of interesting experiences. When they first built those dams they didn't have good head gates and they didn't have good equipment to put them in. I'm going to ask Ray to tell us how they got the head gate open in one of the Goose Lakes one time when they couldn't reach the wire.

Ray: It was cold, in the spring, and a cool mountain breeze blowing. There was just a piece of tin over the end of the culvert, it didn't have a screw head gate. We just had a wire tied to it, so we could pull the tin off to make the water run. We had this wire tied to a tree. Well, somebody thought it would be funny to untie that wire and throw it out in the lake.

We've got to get the water out of there. The spillway of the Twins goes down and dumps into the Upper Goose Lake and the Upper dumps into the Lower one, and this was the tin on the Lower head gate. Dee Jenkins was president of the Company, he looked at it for just a minute and shucked off his clothes right down to the birth clothing and baled into that cold water and came back up with nothing. That water was just freezing, he shook for a minute and jumped right back

in and came back up with the wire. We pulled the plug off and dumped the water. That's the type of people that made that function and has kept it going. Having determination -- when they know they have a problem -- right then was the time to fix it.

Lorn: Ya. He kind of made a little bit of history that day. I don't think anybody else would have done it.

Ray: No, that's just the kind of person he was. If there was a problem he was there till it was fixed and the water was coming back down to the valley then he would come home to farm.

There were lots of directors that held the Company together and did a good job before him.

He's not the only director that did something great for the Company; 'because they all did. In the beginning, 1919 they needed the water and they didn't have any money. There were a lot of problems these early people worked through. What we need to do is go through the minute book and get a list of all the directors that have served this Company and add it to this tape.

Ray: All the documents have been filmed and are on file at the County Library Regional Room, at the County Recorder's Office and State Archives in Salt Lake. We've done that to preserve these records for anybody that wants knowledge and interested in reading about the irrigation system in the Ashley Valley. It's no different than any other history; it's just a piece of history that we've been involved in here.

Oaks Park is 25 miles away from town - at one time they had a telephone line there and an old telephone that you could wind up and generate enough electricity you could talk on it and ring it. Now they have cell phones and they work real good but they don't work from that lake to town. You got to come out on the mountain a few miles before you can get out on them. That shows why those people doubted that you could run water up hill. If you're down on the back side of the mountain enough that a cell phone won't work, then you're down pretty far in a hole.

You know, they didn't have as much cement as they needed or they would have cemented that whole tunnel coming out of there. I bet cement was awful expensive to haul from Devil's Slide to the Buck Pasture without any trucks, transportation or money. It was hard to come back.

Lorn: It had to be all hand batched. The part of that tunnel that is in concrete is in little sections about four feet long. They had to form that up from the inside and poke the concrete back in there. Take it out and move on to the next section. You can see, in the tunnel today, the form boards that are left. Using pit-run gravel and hand-batched cement; we thought we would have a lot of problems down in there but — what about four or five years ago we went down in there and grouted all the holes we could find. There wasn't much deterioration in there at all.

Ray: A few years ago I ran some figures and that cement up there cost about \$600 a yard then. I bet it would run over a \$1000 a yard today. In place.

Lorn: We've had to build some diversion structures down — well there is one in Government Park, one in Twin Parks. The concrete that went into those, is what you're talking about, \$600, and that was several years ago. I bet you're right, it would be \$1000 today.

Ray: Lorn and I went up there and inserted them out-let pipes going out of Long Park and down to the Goose Lakes and threaded a piece of this high-density foam pipe [poly-pipe] inside that old corrugated pipe and we had quite a riggin' to put that together and thread it through there then grout it. We had the cement grout shipped up there and a pump hooked up and pumped that in there. It doesn't work very fast up there. It's pretty slow go.

Lorn: There is a lot of interesting things in the minute books and as Ray said they have all been microfilmed up to the beginning 2004 and they are available in the County Library if anyone wants to look up some detail. I guarantee you can spend several hours reading.

Ray: Edith Cooper was a lawyer here in Vernal and they held their meetings in her office and the minutes were written on little pieces of scratch paper. They couldn't even afford paper to keep minutes of their meetings, so you can see how broke they were and they are going to build a dam the size of Oaks Park, 6200 acre foot dam. That shows the determination of these men to get water down into this valley.

Lorn: Some of these minutes were written on pink paper, some written on tissue paper, some written on the back of paper found in the waste basket of the lawyers office. Some of them are getting pretty hard to read. Most of them were written in pencil and getting pretty dim. I don't know how the microfilm turned out. You have to study some of them pretty good to figure out what it says.